

**National Institutes of Health
Opening Statement
Hearing: August 23, 2018**

- The Senate Committee on Health, Education, Labor and Pensions will please come to order.
- Senator Bennet and I will each have an opening statement, and then I will introduce our witness – National Institutes of Health Director Francis Collins.
- Then we will hear from Dr. Collins and senators will each have 5 minutes to ask questions.

Introduction:

- Not long ago, I ran into a friend who is very interested in Vanderbilt University Medical Center’s cancer research.
- He said, “Isn’t it a shame that the government isn’t funding biomedical research like it ought to.”
- So this is how I replied to him:
 - In December, 2016, Congress passed what Senator McConnell called the “most important legislation of the year,” the 21st Century Cures Act.
 - We gave the National Institutes of Health \$4.8 billion for the Precision Medicine Initiative, the BRAIN Initiative, Cancer Moonshot and regenerative medicine, as well as new flexibility and authorities to conduct the research that we hope will lead to breathtaking new medicines, treatments, and cures.
 - And thanks to Senators Blunt, Murray, Durbin, Moran, and other Senators, the Appropriations Committee is on track to provide record funding for the fourth year in a row:
 - First, Congress increased NIH funding by \$2 billion in 2015;
 - Then, we increased NIH funding by an additional \$2 billion in 2016;
 - And then in 2017, Congress increased funding for NIH by \$3 billion, including \$500 million to work on a non-addictive painkiller.
 - And today, we expect the full Senate to approve an additional \$2 billion increase to NIH funding for next year.

- This means, if the bill we hope the Senate approves today is signed into law, Congress will have increased funding for NIH by \$9 billion since 2015 – a 30 percent increase.
 - These increases have included the funding we included to deliver on Cures.
- The purpose of this hearing is oversight, to make sure that this record amount of billions of new dollars for biomedical research is being spent wisely.

Bold Predictions

- The reason Congress has devoted so much funding to biomedical research is captured in testimony you gave to the Senate Appropriations Committee in April 2016, when you offered ten “bold predictions” of what we might be able to achieve in the next ten years if we continued to invest in research.
- Some of those predictions were:
 - Being able to identify Alzheimer’s disease before symptoms appear;
 - The possibility we could rebuild a patient’s heart with their own cells;
 - The creation of a safe and effective artificial pancreas, making life easier and healthier for the millions of Americans with diabetes;
 - Development of new vaccines, including for Zika and HIV/AIDS, and a universal flu vaccine;
 - Development of a new, non-addictive painkiller, which may be the “holy grail” to solving the opioid crisis;
 - Significant progress on the Precision Medicine Initiative, which aims to map the genomes of 1 million volunteers so we can better tailor treatments to individual patients; and
 - New treatments for cancer patients.
- There are two things I think we should keep in mind when we look at the large increases in funding Congress has given the NIH in recent years:

- First, we often say it is hard to think of a major scientific advancement since World War II that has not been supported by federal funding.
- But we are not the only country to have figured that out.
 - Other countries have seen that investing in basic research can lead to breathtaking new discoveries.
 - Since 2007, China has increased its spending on basic science by a factor of four and may surpass the United States in total spending on research and development this year, according to Norm Augustine, who, during the George W. Bush administration, chaired the bipartisan committee charged with making recommendations about how to retain America's competitive advantage.
- The second thing to keep in mind is that these large increases in funding for biomedical research and other increases for our national laboratories and other basic research are not the part of the federal budget that creates the huge national deficit.
 - This spending is part of the so-called discretionary spending, which is roughly 29 percent of all federal spending and includes NIH, national defense, national parks, and national laboratories.
 - Over the last ten years, this is the part of the budget that has grown at about the rate of inflation and over the next ten years, is expected to grow a little more than the rate of inflation.
 - So, funding for research is not the reason for the increasing federal debt.
 - What causes the federal debt to increase is spending on entitlements, which according to the Congressional Budget Office is going to squeeze funding for research, our national labs and our national security over the next 10 years.

Research Integrity

- I have one other topic, Dr. Collins, I want to give you an opportunity to discuss.
- You recently told Senator Murray and me information about an ongoing investigation into federally funded research, including, in some cases, research conducted by foreign nationals.

- I would ask you to take a few extra minutes during your testimony to brief the Committee on this issue.
- It is important to protect the integrity of research funded by the federal government.
- It is also important to recognize the role that scientists from other countries have played in research funded by the U.S. government.
 - For example, the director of Oak Ridge National Laboratory came to this country from India, before he became a citizen. The incoming director of the Los Alamos Laboratory came from Canada, before he became a citizen. And the director of the National Renewable Energy Laboratory came from Germany before he became a citizen.
 - Many graduate students at US universities who work on NIH grants are foreign nationals legally in the U.S.
 - And since 2000, 33 Americans who were born in other countries have won Nobel Prizes in Chemistry, Medicine, and Physics.
 - So, I want to acknowledge the great advantage to our country of attracting the brightest people from around the world to our universities and laboratories as long as they conduct their research in appropriate ways.
- This is an issue that impacts more than just the NIH and more than just this committee's jurisdiction.
- But, if there are some bad actors who are attempting to influence NIH-funded research, we want to know about it and we want to know what authority you need, or others need, to deal with it.